

Waterhemp Management in Early Planted Enlist Soybean (Brooklyn, WI 2022)

Trial Information

Trial Sponsor(s): Syngenta

Objective: Compare Syngenta soybean herbicide programs to industry standards for waterhemp management in early planted Enlist soybeans

Crop: Enlist Soybean

Variety: NK24-G7E3

Weed species (pressure): waterhemp (high-very high)
velvetleaf (moderate)

Herbicide Application(s): PRE – 4/27
PPOST – 6/16 (V3/V4 soybean)

For the full report see trial #22-BRO-SB11 in the [2022 Wisconsin Weed Science Research Report](#)



Cropping Systems Weed Science
UNIVERSITY OF WISCONSIN-MADISON

syngenta

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Trt #	Herbicide (rate acre ⁻¹)	Injury (%)		Waterhemp (%)					Yield ^b bu acre ⁻¹	
		6/3	6/29	6/3	6/14	6/29	7/13	9/29		
1	Untreated Check	0	0	0	0	0	0	0	26 b	
Two Pass – PRE (4/27) <i>fb</i> POST (6/16)		POST		POST						
2	Boundary (2 pt) <i>fb</i> Sequence (3.5 pt) + Enlist One (32 oz) + Class Act Ridion (1% v/v)	3.3	4.5	94	55	69	72	76	68 a	
3	Tendovo (2.1 qt) <i>fb</i> Sequence (3.5 pt) + Enlist One (32 oz) + Class Act Ridion (1% v/v)	4.0	4.3	92	64	71	70	75	64 a	
4	Boundary (2 pt) <i>fb</i> Prefix (2 pt) + Roundup PM3 (26 oz) + Enlist One (32 oz) + AMS*	3.8	15.0	82	51	77	74	66	65 a	
5	Tendovo (2.1 qt) <i>fb</i> Prefix (2 pt) + Roundup PM3 (26 oz) + Enlist One (32 oz) + AMS*	3.8	15.0	89	61	79	75	70	66 a	
6	Prefix (2 pt) + Canopy (2.25 oz) <i>fb</i> Sequence (3.5 pt) + Enlist One (32 oz) + Class Act Ridion (1% v/v)	4.5	4.0	97	81	78	80	80	68 a	
7	Sonic (6 oz) <i>fb</i> Sequence (3.5 pt) + Enlist One (32 oz) + Class Act Ridion (1% v/v)	3.3	4.3	91	61	69	74	85	68 a	
8	Zidua PRO (6 oz) <i>fb</i> Sequence (3.5 pt) + Enlist One (32 oz) + Class Act Ridion (1% v/v)	3.3	4.3	98	78	81	78	78	66 a	
9	Fierce XLT (3.75 oz) <i>fb</i> Roundup PM3 (26 oz) + Enlist One (32 oz) + Warrant (48 oz) + AMS*	4.5	3.5	98	80	86	84	82	68 a	
		LSD ($\alpha=0.10$)	ns	0.6	7	10	5	6	5	5
		p value	0.452	<.001	0.013	<.001	<.001	0.019	<.001	<0.001

^aVisual control from 70-100% is illustrated on a color scale with green representing greater weed control values.

^bYield values with the same letter are not significantly different.

*Spray grade AMS applied at 8.5 lb/100 gal.

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Plot pictures taken on 6/3

37 days after the PRE application

The number in the upper right-hand corner is the average % waterhemp control of 4 replications

**37 days after PRE (6/3)
Untreated Check**

0%



37 days after PRE (6/3)
PRE: 2 pt Boundary

88%



37 days after PRE (6/3)
PRE: 2.1 qt Tendovo

91%



37 days after PRE (6/3)
PRE: 2 pt Prefix + 2.25 oz Canopy

97%



**37 days after PRE (6/3)
PRE: 6 oz Sonic**

91%



37 days after PRE (6/3)
PRE: 6 fl oz Zidua PRO

98%



**37 days after PRE (6/3)
PRE: 3.75 oz Fierce XLT**

98%



Waterhemp Management in Early Planted Enlist Soybean (Brooklyn, WI 2022)

Plot pictures taken on 6/14

48 days after the PRE application
2 days before the POST application

The number in the upper right-hand corner is the average % waterhemp control of 4 replications

48 days after PRE (6/14)
Untreated Check

0%



**48 days after PRE (6/14)
PRE: 2 pt Boundary**

53%



**48 days after PRE (6/14)
PRE: 2.1 qt Tendovo**

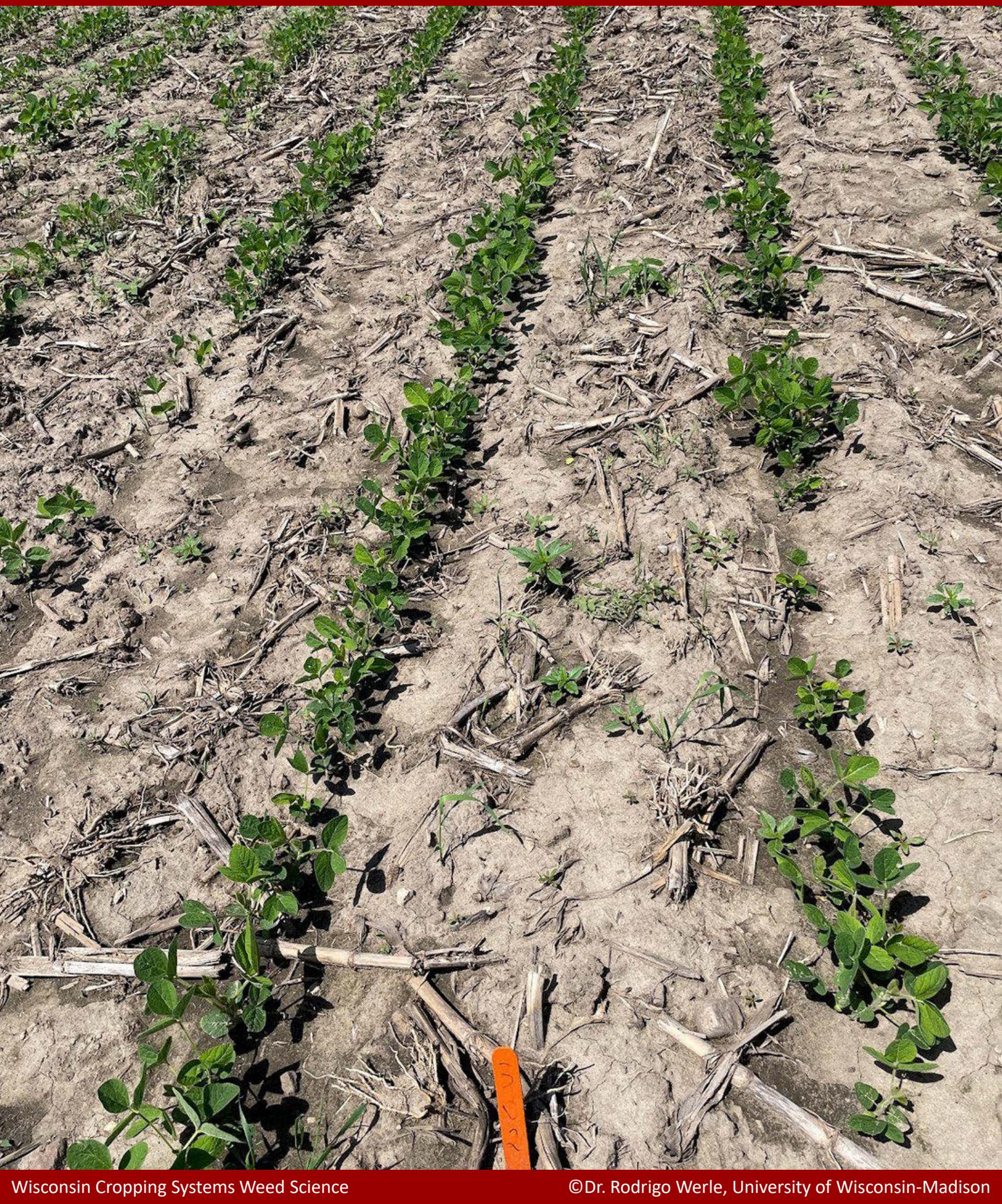
63%



48 days after PRE (6/14)

PRE: 2 pt Prefix + 2.25 oz Canopy

81%



48 days after PRE (6/14)

61%

PRE: 6 oz Sonic



35

48 days after PRE (6/14)

PRE: 6 fl oz Zidua PRO

78%



48 days after PRE (6/14)

PRE: 3.75 oz Fierce XLT

80%



Waterhemp Management in Early Planted Enlist Soybean (Brooklyn, WI 2022)

Plot pictures taken on 7/13

77 days after the PRE application
27 days after the POST application

The number in the upper right-hand corner is the average % waterhemp control of 4 replications

77 days after PRE (7/13)

Untreated Check

0%



27 days after POST (7/13)

PRE: 2 pt Boundary *fb*

POST: 3.5 pt Sequence + 32 fl oz Enlist One + 1% Class Act Ridion

72%



27 days after POST (7/13)

PRE: 2.1 qt Tendovo *fb*

POST: 3.5 pt Sequence + 32 fl oz Enlist One + 1% Class Act Ridion

70%



27 days after POST (7/13)

PRE: 2 pt Boundary *fb*

POST: 2 pt Prefix + 26 fl oz Roundup PM3 + 32 fl oz Enlist One + AMS

74%



27 days after POST (7/13)

PRE: 2.1 qt Tendovo *fb*

POST: 2 pt Prefix + 26 fl oz Roundup PM3 + 32 fl oz Enlist One + AMS

75%



27 days after POST (7/13)

PRE: 2 pt Prefix + 2.25 oz Canopy fb

POST: 3.5 pt Sequence + 32 fl oz Enlist One + 1% Class Act Ridion

80%



27 days after POST (7/13)

PRE: 6 oz Sonic *fb*

POST: 3.5 pt Sequence + 32 fl oz Enlist One + 1% Class Act Ridion

74%



27 days after POST (7/13)

PRE: 6 fl oz Zidua PRO fb

POST: 3.5 pt Sequence + 32 fl oz Enlist One + 1% Class Act Ridion

78%



27 days after POST (7/13)

PRE: 3.75 oz Fierce XLT *fb*

POST: 26 fl oz Roundup PM3 + 32 fl oz Enlist One + 48 fl oz Warrant + AMS

84%



Waterhemp Management in Early Planted Enlist Soybean (Brooklyn, WI 2022)

Plot pictures taken on 9-29

The number in the upper right-hand corner is the average %
giant ragweed control of 4 replications

End of Season (9/29)

Untreated Check

0%



End of Season (9/29)

PRE: 2 pt Boundary fb

POST: 3.5 pt Sequence + 32 fl oz Enlist One + 1% Class Act Ridion

76%



End of Season (9/29)

PRE: 2.1 qt Tendovo *fb*

POST: 3.5 pt Sequence + 32 fl oz Enlist One + 1% Class Act Ridion

75%



End of Season (9/29)

PRE: 2 pt Boundary fb

POST: 2 pt Prefix + 26 fl oz Roundup PM3 + 32 fl oz Enlist One + AMS

66%



End of Season (9/29)

PRE: 2.1 qt Tendovo *fb*

POST: 2 pt Prefix + 26 fl oz Roundup PM3 + 32 fl oz Enlist One + AMS

70%



End of Season (9/29)

PRE: 2 pt Prefix + 2.25 oz Canopy fb

POST: 3.5 pt Sequence + 32 fl oz Enlist One + 1% Class Act Ridion

80%



End of Season (9/29)

PRE: 6 oz Sonic *fb*

POST: 3.5 pt Sequence + 32 fl oz Enlist One + 1% Class Act Ridion

85%



End of Season (9/29)

PRE: 6 fl oz Zidua PRO fb

POST: 3.5 pt Sequence + 32 fl oz Enlist One + 1% Class Act Ridion

78%



End of Season (9/29)

PRE: 3.75 oz Fierce XLT fb

82%

POST: 26 fl oz Roundup PM3 + 32 fl oz Enlist One + 48 fl oz Warrant + AMS

